	CALIBRES NO. 01		CS08-19-C-001-E	A
		Made by: pelrom	Date: 15.04.04		

Circuit Calibre 1383

FIXING THE CIRCUIT

Problem

- Over the course of time, the circuit of the calibres 1380 and 1382 has been modified.
- At first, these calibres were equipped with a circuit cover 1380/9655. This module cover is less likely to be fitted in future, since the calibres 1380 and 1382 will be replaced by the calibre 1383.
- The circuit with or without cover is fixed with three screws of different length.

IDENTIFICATION OF THE ETA-CALIBRE 956.112

Analysis

The screws must be shorter to avoid damaging the date indicator 1380/9235 in cases where the circuit cover is no longer used.

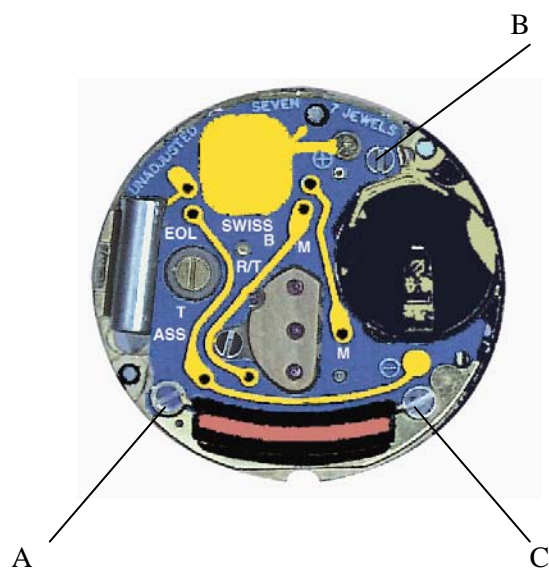
For the ETA-calibre 956.112, the following parts differ from the calibres 1380/1382:

- 100 Main plate
- 110 Train wheel bridge
- 435 Yoke
- 2576 Date jumper
- 4000 Circuit with servo control, EOL-display and inhibition
- Screws of the circuit (see table below)

To avoid any confusion, this ETA-calibre will be registered under the Omega-calibre number 1383.



In the following table, you will find which screw must be used in which case

Omega Calibre	ETA Calibre	Module Cover	Screw		
			A	B	C
1380	956.111	yes	2992	2991	2993
1380	956.111	no	2993	3467	2993
1382	956.111	yes	2992	2991	2993
1382	956.111	no	2993	3467	2993
1383	956.112	no	2993	3467	2993



INFORMATION

Only the ETA-calibre number is identified on the movement.

	 CALIBRES NO. 02	CS08-19-C-002-E	A
		Made by: pelrom	Date: 15.04.04

Calibres 1378 / 1379 / 1478 / 1479

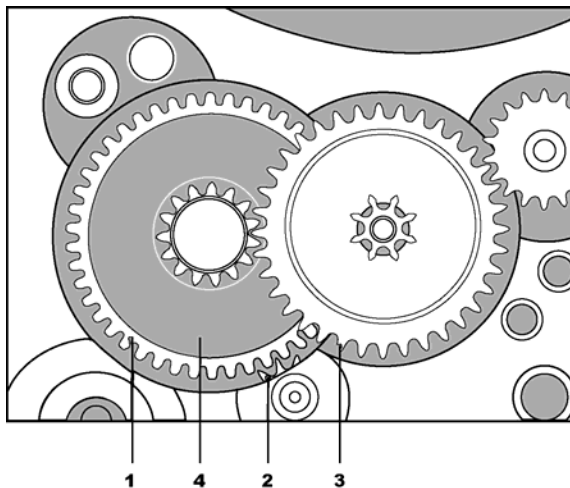
Repair diagnosis

PROBLEMS

1. Risk of a lack of synchronisation between the centre wheel (1) and the third wheel pinion (2)
2. Watch stopping or losing time
3. Lower working limit exceeds 1.15 V
4. The hands touch the crystal or the dial

SOLUTIONS

1. **Risk of a lack of synchronisation between the centre wheel (1) and the third wheel pinion (2).**
 - Insert a disk 1379/497 (4) (thickness 0.40mm) between the centre wheel (1) and the minute wheel (3).
 - Lower working limit.



1. Watch stopping or losing time



- Checks:
 - Battery voltage.
 - Quartz function.
 - Battery contact.
- Replace: (if necessary)
 - Battery or
 - Circuit.

2. Lower working limit exceeds 1.15 V

- Checks:
 - Freedom of the moving parts.
 - Freedom of the hour wheel under the dial (endshake 0.03/0.05 mm).
 - Freedom of the minute wheel.
 - Complete service (if necessary).

3. The hands touch the crystal or the dial

- Check the centre tube.
- If necessary, try to correct it or change the main plate (new version with a riveted steel tube).

		CALIBRES NO. 03		CS08-19-C-003-E	A
		Made by: pelrom	Date: 15.04.04		

Repair procedure / Calibre 1459

Circuit replacement procedure

PROBLEMS

1. Opening the “De Ville” case-back
2. Watch stopping or losing time
3. Diagnosis
4. Handling and hand-fitting

SOLUTIONS

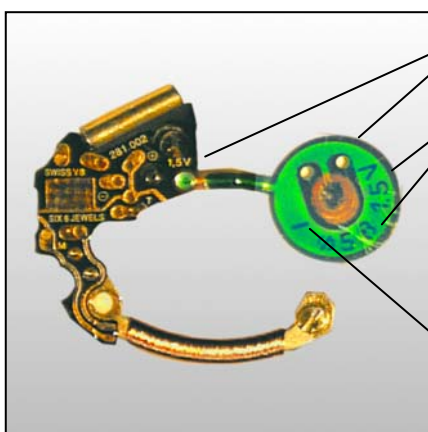
1. Opening the “De Ville” case-back
 - “Robur” rack staking tool recommended (available)
2. Watch stopping or losing time
 - Check the voltage
 - Check the battery code
 - Check quartz function (regulation)
 - Function of the wheels at fast speed
3. Diagnosis
 - Replace battery or circuit
 - Check freedom of moving parts
 - Complete service (if necessary)
4. Handling and hands-fitting
 - Movement holders are indispensable

IDENTIFICATION

Old version



New version



Battery voltage: 1.5 V

Imprint
Ø 5.8 / 1.5 Volts
on the battery contact

Polarity
Negative battery contact

SPECIFICATIONS OF THE NEW CIRCUIT

Battery voltage: 1.55 Volts

Imprint : Ø 5.8 / 1.5 Volts on the battery contact

Polarity: negative battery contact

SPECIFICATIONS OF THE BATTERY

Type: Omega 9951

Voltage: 1.55 Volts

Capacity: 5.5 mAh

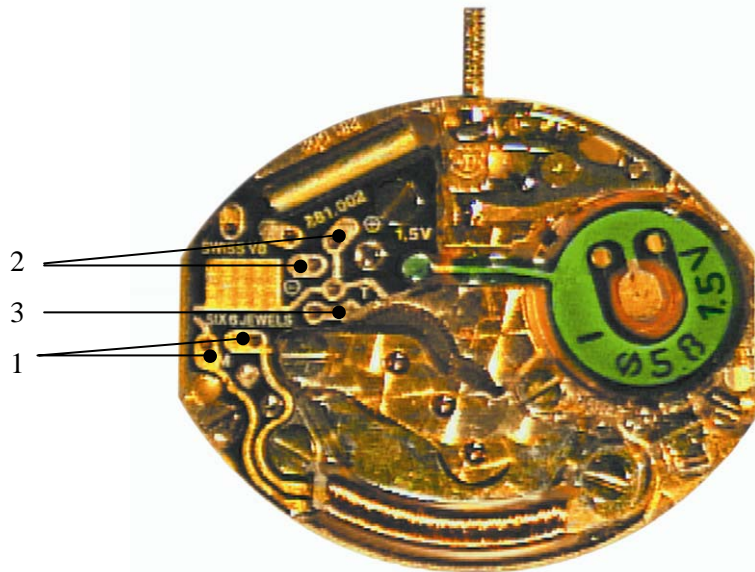
Dimensions: 5.8 x 1.2 mm

REPLACEMENT OF THE CIRCUIT

A. Remove the old circuit (3 screws)

B. Fit the new circuit (3 screws)

3. ELECTRICAL TESTS





Position	Measurement	Test
1	2.10 - 2.50 K Ω	Resistance of coil
2	0.3 μ A	Consumption of movement
3	1.1 Volts	Lower working limit

For lower working limit, connect point T to negative printed circuit conductor.

MOVEMENT REPAIR OR STANDARD EXCHANGE

- A. Movement consumption (**new circuit**) 0.3 μ A
 Movement lower working limit (**new circuit**) 1.10 Volts
- B. When removing factory-fitted hand (standard exchange), ensure that the hour and center wheel are well supported.
- C. Check the condition of the wheels, their flatness and endshake.
- D. Fit the dial and hands, case up (do not close the case-back)
- E. Watch consumption (see point A)
 Watch lower working limit (see point A)
- F. Fit the new Omega 9951 battery with 1.55 V
- G. Check the rate – make final check.

	 CALIBRES NO. 04	CS08-19-C-004-E	A
		Made by: pelrom	Date: 15.04.04

Calibres 1108/1109/1110/1111

Repair diagnosis

PROBLEMS

1. Sliding mainspring
2. Insufficient automatic winding
3. Codification

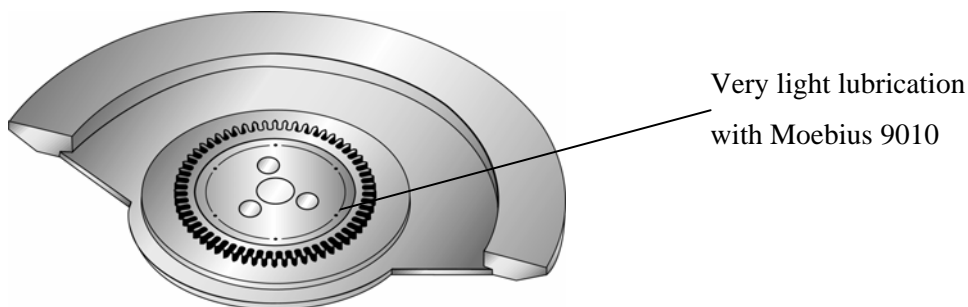
SOLUTIONS

1. Sliding mainspring

- Wind the watch manually until fully wound, check the power reserve:
It should be at least 44 hours.

2. Insufficient automatic winding

- 2.1 Test the wind on a Cyclotest 1 rpm for 24 hours and check the power reserve: It should be at least 44 hours.
- 2.2 Check the quality of the reversing wheel 1110/1464 and the clearance of the ball bearing of the rotor 1110/1479, which should be checked by air projection, using small bellows.

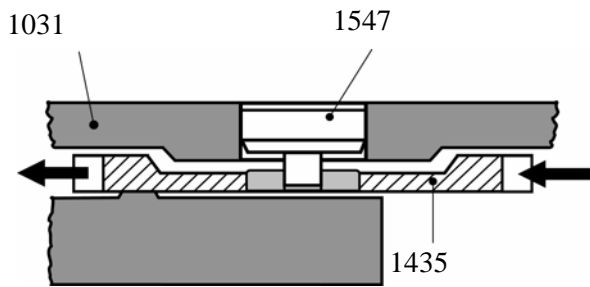


Note

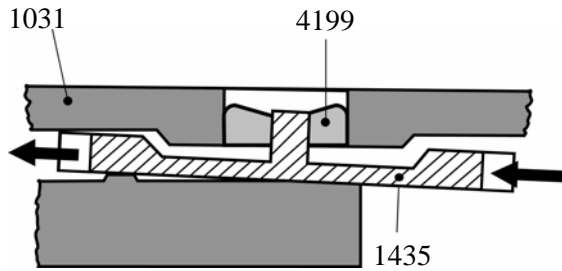
The ball bearing 1110/1479 is available from stock already lubricated.

If the ball bearing has to be cleaned, oil lightly with Moebius 9010 or dip it in a greasy solution (benzine + oil Moebius 9010 in a proportion of 5/1000).

2.3 New intermediate reduction wheel 1110/1435.



- The jewel 4199 is replaced with bushing 1547, which is driven in until level with the bridge.



- The stud of intermediate wheel 1435 should be lubricated with thick Moebius 8200 oil or D5 grease.

2.4 Modified rotor

In order to improve the winding, the rotor's weight has been increased by reducing the bevelling.

Old execution	
1110/1026	
Cal. 1110 1111 Ω	
(Cal. 2892-2 ETA)	
New execution	
1110/1026 CS	
1108/1143	
Cal. 1108 + 1109 Ω	
(Cal. 2892-A2 ETA)	

Note

It is vital that the correct clearance is ensured between the case-back and the rotor in order to avoid any disturbance in the event of shocks.

3. Codification

- Introduction of the calibres 1108/1109.



Customer service

- The calibres 1108 and 1109 also have the improvements listed under points 2.2, 2.3 and 2.4.
- The calibres 1110 and 1111 can be modified on all Omega references except on Constellation models; ref. 168.0075 and 368.1075.

Note

The intermediate wheel 1110-1435 is supplied with its bushing (available from stock).

The rotor has been identified CS 1110-11-40 and is available from stock.

		CALIBRES NO. 05		CS08-19-C-005-E	A
		Made by: pelrom	Date: 15.04.04		

Calibre 1154

SPARE PARTS MODIFICATIONS

On the calibre 1154 the following spare parts are different compared with calibre 1155:

- 1154/1143/1 RB Rotor (Engraved 1154)
- 1154/303/5 ET Index (Etachron system)
- 1154/375 ET Stud support (Etachron system)
- 1154/710 Pallet fork (jewelled pallets)
- 1154/721 ET Balance (Etachron system)
- 1154/2551 Calendar-plate
- 1154/8062 ET Minute counter driving wheel (jewelled)
- 1154/8200 ET Lock, 2 functions (steel)

VERSION WITH 25 JEWELS

Additional jewels are found on the following pieces:

- 1154/100 RB Main plate
- 1154/106 Barrel and train wheel bridge
- 1154/1142 Self-winding mechanism bridge
- 1154/8500 Chronograph bridge
- 1154/8062 Minute counter driving wheel

Regulation of the hairspring

The stud A (Figure 1) revolves freely. The hairspring S can be centred between the index pins B without bending the hairspring. To turn stud A, use tweezers or the tool ref. 502 200 0061.

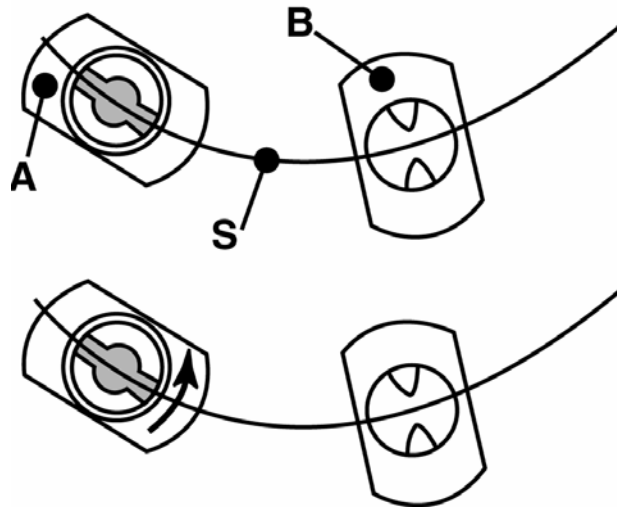


Figure 1

The index pins B (Figure 2) can also be turned using tweezers or the tool ref. 502 200 0061. By this operation the play J of the hairspring S between the index pins can be increased or decreased (which affects the isochronism).

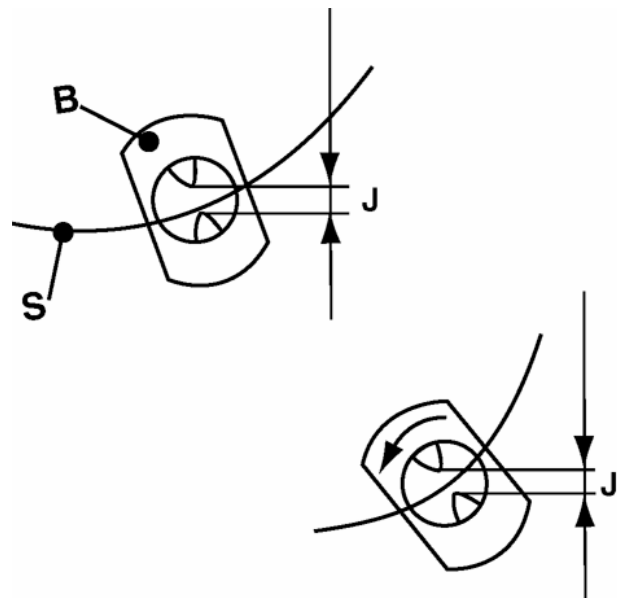


Figure 2

DISASSEMBLING AND ASSEMBLING OF THE BALANCE (IF NECESSARY)

This operation must be carried out when the balance is on the movement. First open the index pins B to avoid distorting the hairspring. Then it is possible to take out the stud A from the stud support using tweezers and making a sideways lever movement with the ends of the tweezers set between the head of the stud and the index's exterior diameter (Figure 3)

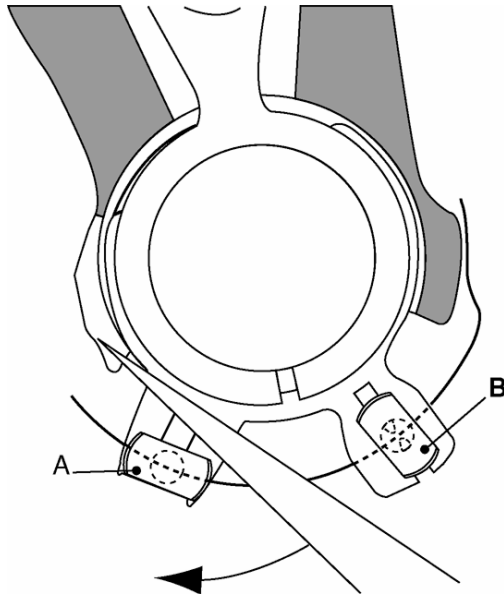


Figure 3

To replace the stud, insert it in the slit of the stud support and push it in with a flat tool (Figure 4). (Balance cock mounted on the plate).

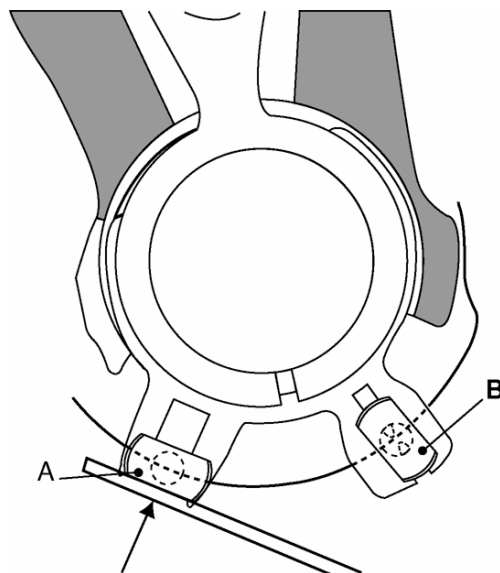




Figure 4

		CALIBRES NO. 06		CS08-19-C-006-E	A
		Made by: pelrom	Date: 15.04.04		

Calibre numbering

Personalised Omega movements

Calibres concerned : 861, 863, 1110, 1111, 1140, 1150, 1154, 1155, 1378, 1379, 1430, 1432, 1438, 1455, 1470

CALIBRE NUMBERING

Subject

- The above-mentioned Omega movements **have received quality enhancements**: changing from the older gilt or simple rhodium-plated versions to high-grade rhodium-plated versions. These modifications were started in 1995 on the mechanical movements.
- On the new versions, the basic calibre (ETA) is no longer indicated.

Decision



- A new codification of the calibres concerned (see list).

Notes

- The bridges, main plates and electronic circuits are **specific** to a particular calibre and must not be used on the other movements. Only the basic components are interchangeable.
- The existing technical documentation remains valid.

CONVERSION TABLE

Old number	<i>New number</i>	<i>New number</i>	Old number
861	<i>1861</i>	<i>1108</i>	1110
863	<i>1863</i>	<i>1109</i>	1111
1110	<i>1108</i>	<i>1141</i>	1140
1111	<i>1109</i>	<i>1151</i>	1150
1140	<i>1141</i>	<i>1152</i>	1155
1150	<i>1151</i>	<i>1164</i>	1154
1154	<i>1164</i>	<i>1456</i>	1455
1155	<i>1152</i>	<i>1471</i>	1470
1378	<i>1478</i>	<i>1478</i>	1378
1379	<i>1479</i>	<i>1479</i>	1379
1430	<i>1530</i>	<i>1530</i>	1430
1432	<i>1532</i>	<i>1532</i>	1432
1438	<i>1538</i>	<i>1538</i>	1438
1455	<i>1456</i>	<i>1861</i>	861
1470	<i>1471</i>	<i>1863</i>	863

		CALIBRES NO. 08		CS08-19-C-008-E	A
		Made by: pelrom	Date: 15.04.04		

All mechanical movements except the coaxial escapement

LUBRICATION OF THE ESCAPEMENT

Problem

Unstable amplitude of mechanical movements.

Analysis

The lubrication of the escapement may not remain effective over the long term.

Solution

In factory production, LUBRIFAR is used for the lubrication of the escapement for all mechanical movements in the current collection.

LUBRIFAR is a mixture of molybdenum-bisulphide (black) and oil 9010 without additive. LUBRIFAR's main advantage over conventional lubricants is its long-lasting effect. The micro-grains store the grease 9415 which completes the lubrication. This method ensures a stable amplitude over a period of several years.

Application

In factory production, LUBRIFAR is sprayed on the perimeter of the escape wheel (including the impulse-plane). Due to this treatment a black granular coloration appears on the circumference of the wheel.

Additionally, several small drops of grease 9415 should be placed on several teeth of the escape wheel (or on the impulse-plane of the pallet-stones).

General

An excessive amount of grease 9415 reduces the effect of LUBRIFAR (diluting effect of LUBRIFAR).

Adjustments to the movement should be made 24 hours after the manipulation. This period is required for activating the grease 9415 and stabilising the amplitude.

If the LUBRIFAR lubrication dries out, it can be reactivated by adding some more grease 9415 in accordance with the above-mentioned procedure (see application page 1).

Cleaning

When cleaning an escape wheel with LUBRIFAR treatment, whether in a benzine cup or in a cleaning machine, the black granulation disappears. **Once an escape wheel has been cleaned, it can only be lubricated conventionally (grease 9415).**

In a cleaning machine, the last bath in particular has to be perfectly clean.

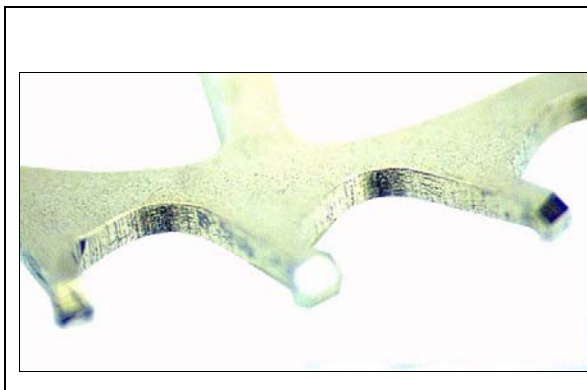
Recommendation

Instead of cleaning an escape wheel and then lubricating conventionally (which is still possible), the use of a new wheel (pre-lubricated with LUBRIFAR) is recommended. This will ensure a stable amplitude over the long term.

CS Application



Only escape wheels with LUBRIFAR treatment are available.

Without LUBRIFAR



With LUBRIFAR



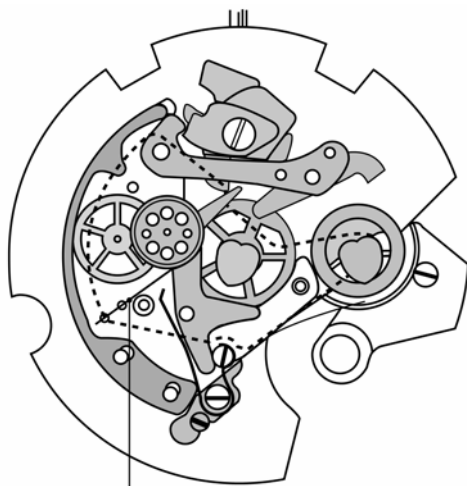
	 CALIBRES NO. 09	CS08-19-C-009-E	A

Calibres 1150 / 1151 / 1152 / 1154 / 1155 / 1164

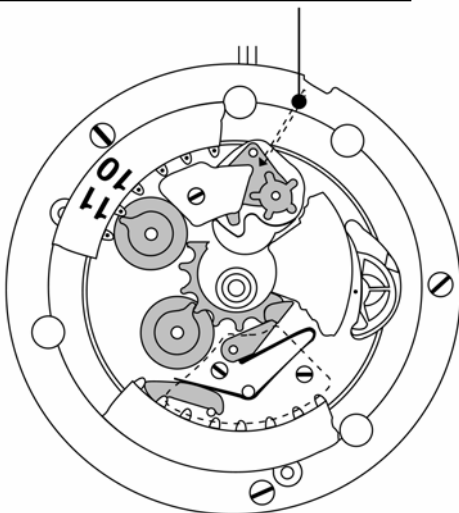
COMPLEMENT TO THE LIST OF PARTS

The following parts are available from CS:

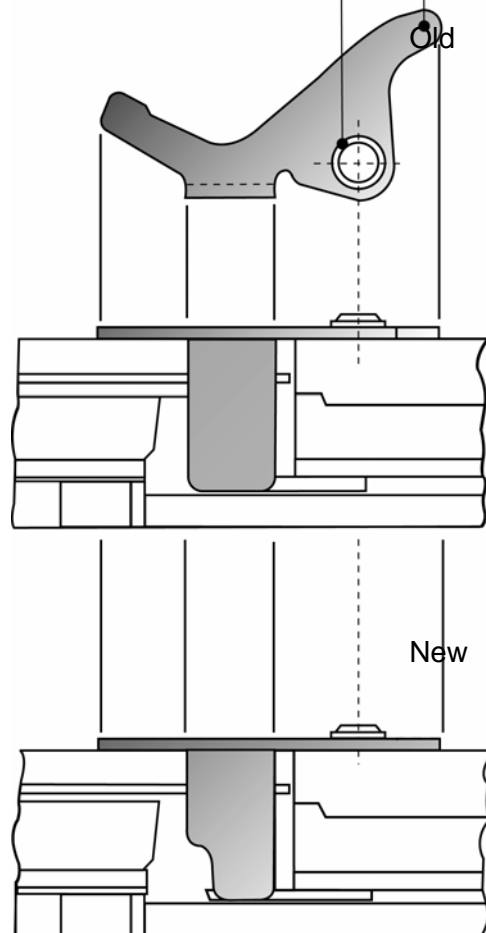
1. Jewels and bushings (see page 2)
2. New parts
3. Spare parts



Reverser click 1150/1428
 Corrector spring 1155/9716





Modified fly-back lever
 1150/8180
 Stud for fly-back lever
 1150/8182



**IDENTIFICATION OF JEWELS AND METAL BUSHINGS
CALIBRE 1150 AND DERIVATIVES (17 AND 25 RUBIES)**

JEWELS								
Total ∅	Hole ∅	Thick	Ref. Ω	No. Rub.	Wheels	No.	Position	
90	25	22	4370	25	Chronograph wheel	8000	above	
100	11	25	4298	25	Pallet fork	710	above	below
100	11	25	4298	17	Pallet fork	710	above	below
100	11	25	4298	25	Escape wheel	705	above	below
100	11	25	4298	17	Escape wheel	705	above	below
100	14	25	4371	25	Oscillating pinion	8086		below
100	25	25	4372	25	Second wheel	224	above	below
100	25	25	4372	17	Second wheel	224	above	below
100	25	25	4372	17	Chronograph wheel	8000	above	
100	25	25	4372	25	Minute-counting wheel	8020	above	
100	25	25	4372	25	Reversing wheel	1488	above	below
100	30	25	4373	25	Third wheel	210	above	
100	30	25	4373	17	Third wheel	210	above	
100	30	25	4373	25	Ratchet wheel driving wheel	1482	above	below
100	30	30	4055	25	Third wheel	210		below
100	40	30	4374	25	Great wheel	201/1	above	
100	40	30	4374	17	Great wheel	201/1	above	
100	60	30	4375	25	Minute counter driving wheel	8062	Wheel	
120	50	30	4376	25	Great wheel	201/1		below
120	50	30	4376	17	Great wheel	201/1		below

BUSHINGS								
Total ∅	Hole ∅	Thick	Ref. Ω	No. rub.	Wheels	No.	Position	
100	14	25	63	17	Oscillating pinion	8086		below
100	25	25	6224	17	Minute-counting wheel	8020	above	
100	25	25	6224	17	Reversing wheel	1488	above	below
100	30	25	6225	17	Ratchet wheel driving wheel	1482	above	below
100	30	30	6157	17	Third wheel	210		below

	 CALIBRES NO. 10	CS08-19-C-010-E	A

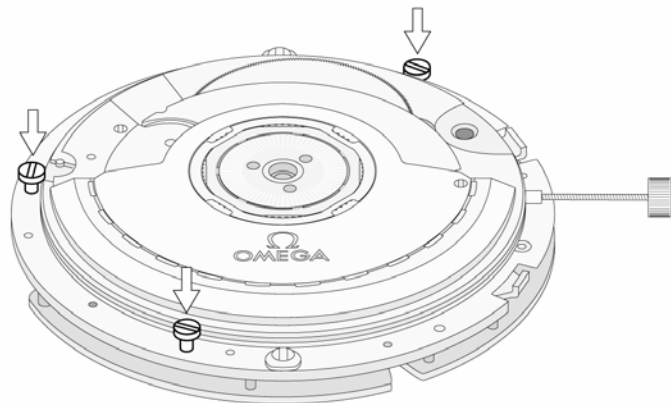
Assembling screw Calibres 1140 / 1141

CS MEASURES

Problem

The assembling screws which attach the basic movement to the chronograph module are fragile.

Figure 1



Analysis

In order to stabilise the screws against tension and shocks, several measures have been taken:

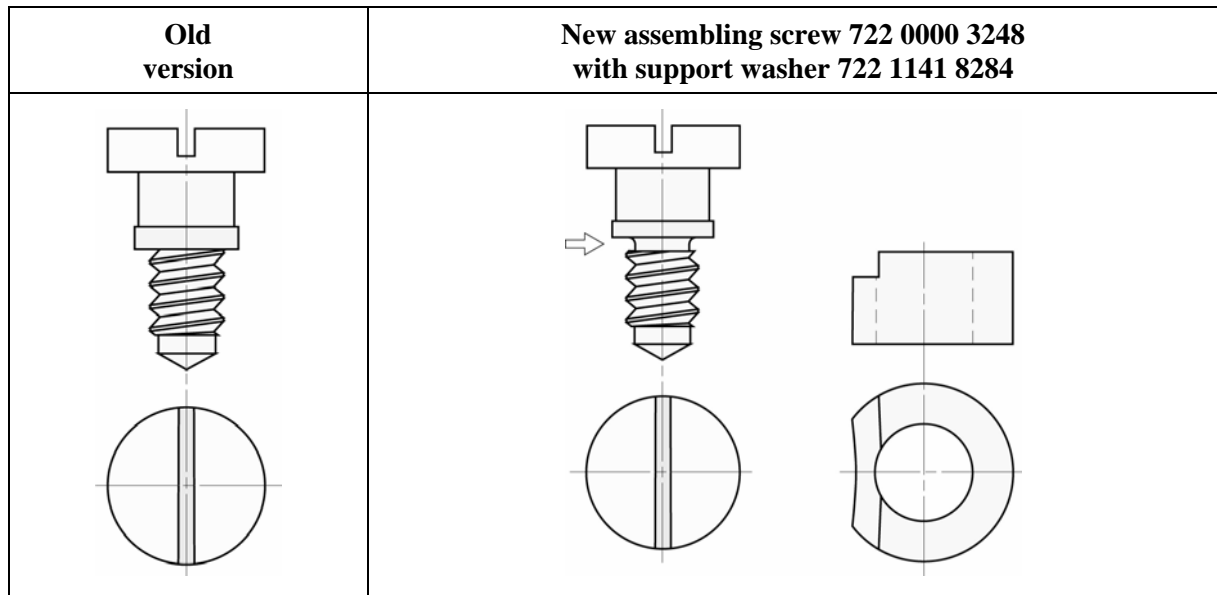
- The new screws, made of stainless steel, have a better resistance than the old screws, which were made of steel for profile turning.
- The screw has been improved by adding a groove at the top of the thread (see figure 2).
- The design has been improved by an additional support washer placed between the chronograph module and the basic movement (see figure 2 and 3).

Solution

Replacement of the old assembling screws by the new version (with the support washer). For all assembling screw orders, the new screws will be delivered with the support washer.

REPLACEMENT OF THE ASSEMBLING SCREW

Figure 2



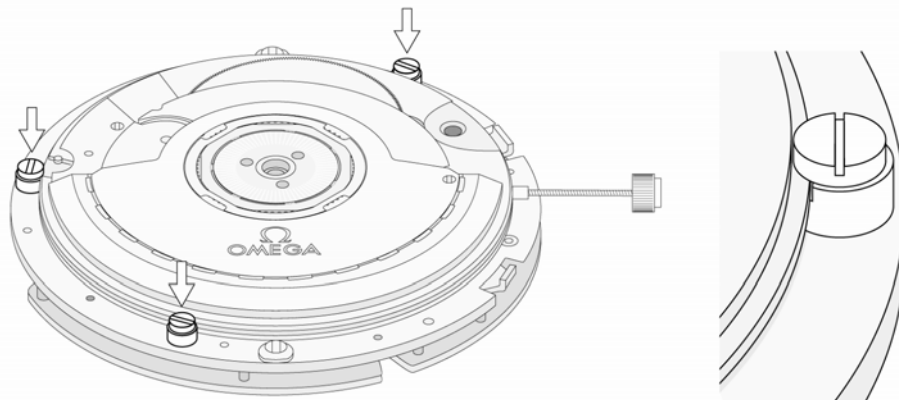
Important



The new assembling screw can be easily identified by the groove at the top of the thread (see figure 2).

Assembling

First place the 3 support washers between the chronograph module and the basic movement. The assembling screws can then be screwed through the support washers.

Figure 3



		CALIBRES NO. 11		CS08-19-C-011-E	A
		Made by: pelrom	Date: 15.04.04		

Elimination of HgO (mercury-oxide) batteries

Calibres 1220 / 1230 / 1250 / 1255 / 1260 / 1300 / 1301 1302 / 1310 / 1315 / 1320 / 1325 / 1330 / 1342 / 1343 1345 / 1346 / 1510 / 1511 / 1516 / 1611

BATTERY REPLACEMENT

Problem

For ecological reasons, battery suppliers will soon stop producing mercury-oxide batteries.

Analysis

This situation forces us to review the power source for OMEGA calibres (with 1.35 V battery) produced before 1980.

Solution

The 1.35 V mercury-oxide batteries must be replaced by the 1.55 V silver oxide batteries (see table page 2).

Remarks

The OMEGA reference numbers will not change. The old batteries will be replaced gradually, in line with availability of the new silver-oxide batteries.

Despite the stronger power supply of 1.55 V, there is no risk of damaging the movement's electronic components; however the higher voltage increases the current consumption and therefore reduces the lifetime of the battery. Apart from the first versions of the electronic modules for calibres 1330 and 1340 (and family) a minimum duration of 12 months is nevertheless guaranteed.

The "min-max" working limits of the calibres with indexing mechanism 1250/1260/1300/1302 must be adapted to the 1.55 V voltage, which means 1.2/1.9 V instead of 1.0/1.7 V.

REPLACEMENT TABLE

Mercury-oxide batteries (HgO)

Calibre	OMEGA No.	Supplier No.	Voltage	Capacity	Dimensions	Max. consp.	Battery life-time
1220/30	9900	343 Renata	1.35	130 mAh	ø 11.6 x 3.6 mm	10 µA	17 months
1250/60	9900	343 Renata	1.35	130 mAh	ø 11.6 x 3.6 mm	9 µA	18½ months
1255	9900	343 Renata	1.35	130 mAh	ø 11.6 x 3.6 mm	10 µA	17 months
1300	9903	354 Renata	1.35	190 mAh	ø 11.6 x 4.2 mm	12 µA	21 months
1301/02	9903	354 Renata	1.35	190 mAh	ø 11.6 x 4.2 mm	12 µA	21 months
1310/15	9903	354 Renata	1.35	190 mAh	ø 11.6 x 4.2 mm	7.5 µA	33 months
1320/25	9906	325 Renata	1.35	70 mAh	ø 7.9 x 3.6 mm	4 µA	22½ months
1330	9910 *	388 Ucar	1.35	60 mAh	ø 8.84 x 3.3 mm	4 µA	19 months
1342 - 46	9910 *	388 Ucar	1.35	60 mAh	ø 8.84 x 3.3 mm	5 µA	15½ months
1510/11/16	9903	354 Renata	1.35	190 mAh	ø 11.6 x 4.2 mm	14 µA	18 months
1611	9907	323 Renata	1.35	105 mAh	ø 7.9 x 5.4 mm	7 µA	26 months



Silver-oxide batteries (AgO)

Calibre	OMEGA No.	Supplier No.	Voltage	Capacity	Dimensions	Max. consp.	Battery life-time
1220/30	9900	344 Renata	1.55	105 mAh	ø 11.6 x 3.6 mm	11.7 µA	12 months
1250/60	9900	344 Renata	1.55	105 mAh	ø 11.6 x 3.6 mm	10 µA	13½ months
1255	9900	344 Renata	1.55	105 mAh	ø 11.6 x 3.6 mm	10 µA	13½ months
1300	9908	386 Renata	1.55	130 mAh	ø 11.6 x 4.2 mm	12 µA	14 months
1301/02	9908	386 Renata	1.55	130 mAh	ø 11.6 x 4.2 mm	12 µA	14 months
1310/15	9908	386 Renata	1.55	130 mAh	ø 11.6 x 4.2 mm	8 µA	21 months
1320/25	9919	384 Renata	1.55	45 mAh	ø 7.9 x 3.6 mm	4.5 µA	13 months
1330	9910 *	329 Renata	1.55	37 mAh	ø 7.9 x 3.1 mm	5.0 µA	12 months
1342 - 46	9910 *	329 Renata	1.55	37 mAh	ø 7.9 x 3.1 mm	5.2 µA	12 months
1510/11/16	9908	386 Renata	1.55	130 mAh	ø 11.6 x 4.2 mm	14 µA	12 months
1611	9907	393 Renata	1.55	80 mAh	ø 7.9 x 5.4 mm	9 µA	15 months

Battery 9910

This special battery 388 ø 8.84, which is used in the calibre groups 1330 and 1340 will be replaced by battery 329 ø 7.90, equipped with an intermediate ring.



		CALIBRES NO. 12		CS08-19-C-012-E	A
		Made by: pelrom	Date: 15.04.04		

Calibres 725, 2520

REPLACEMENT OF THE CALIBRE 725 BY 2520

Problem

Unstable amplitude and irregular running.

Solution

Introduction of the calibre 2520.

Justification

An improvement to the wheel train and an increase in the moment of inertia of the balance have a positive effect on the rate.

INTERCHANGEABILITY

Interchangeability

The calibre 2520 is based on the current version 725. The **complete movements** are interchangeable.

The technical guide **2520**, with interchangeability specifications for the spare parts, is available from Omega.

Maintenance and lubrication specifications for the calibre 725 remain the same for the calibre 2520.

To ensure the quality and proper functioning of the movement, only Omega labelled components must be used.

Spare Parts

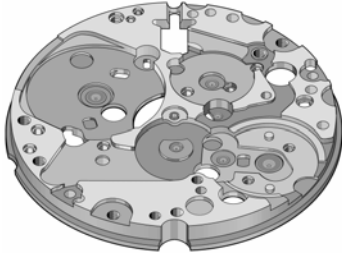
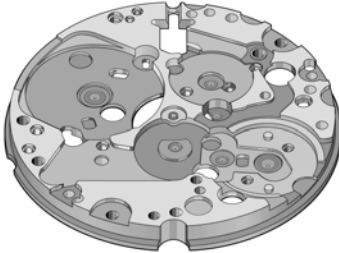

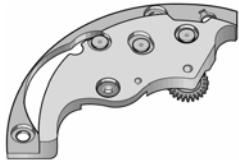

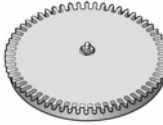




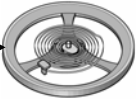


In the case that a spare part of calibre 725 is marked “NO MORE AVAILABLE” in the following list, the complete movement would have to be exchanged with calibre 2520.



Standard replacement

Omega will replace calibre 725 with calibre 2520 at a special exchange price.

The movements must be returned to Omega SA, Spare Parts International, 2500 Bienne 4, Switzerland.

MODIFIED COMPONENTS

Spare Parts	Calibre 725	Calibre 2520
Main plate, jewelled	 No. 722 0725 100	 No. 722 2520 100 Personalised
Barrel bridge	<div style="color: red; font-weight: bold; font-size: 1.2em;">NO MORE AVAILABLE</div>  No. 722 0725 105 Intermediate wheel with bearing (25 teeth)	 No. 722 2520 105 Intermediate wheel with bearing (24 teeth)
Barrel	<div style="color: red; font-weight: bold; font-size: 1.2em;">NO MORE AVAILABLE</div>  No. 722 0725 182 90 teeth	 No. 722 2520 182 91 teeth
Intermediate wheel	<div style="color: red; font-weight: bold; font-size: 1.2em;">NO MORE AVAILABLE</div>  No. 722 0725 203 18 teeth	 No. 722 2520 203 19 teeth
Timed annular balance	 <div style="display: inline-block; vertical-align: middle; text-align: center;"> $I = 2.0$ $I = \text{moment of inertia (mgcm}^2\text{)}$ No. 722 0725 721 </div> <div style="display: inline-block; vertical-align: middle; text-align: center; margin: 0 10px;"> $I = 2.7$ $I = \text{moment of inertia (mgcm}^2\text{)}$ No. 722 2520 721 </div> <div style="display: inline-block; vertical-align: middle; text-align: center;">  <div style="display: inline-block; vertical-align: middle; text-align: center;"> $I = 2.7$ $I = \text{moment of inertia (mgcm}^2\text{)}$ No. 722 2520 721 </div> </div> <p style="text-align: center; font-size: 0.8em;">← Interchangeable →</p>	 $I = 2.7$ $I = \text{moment of inertia (mgcm}^2\text{)}$ No. 722 2520 721
Oscillating weight	 No. 722 725 1143/1 Engraved 725	 No. 722 2520 1143/1 Engraved 2520
All other components keep their codification under calibre 725		

		CALIBRES NO. 13		CS08-19-C-013-E	A
		Made by: pelrom	Date: 15.04.04		

Models with chronometer certificate

REPLACEMENT OF MOVEMENT OR CASE

Chronometer

The OMEGA Chronometer Certificate is awarded to movements which have passed severe precision tests at the Official Swiss Chronometer Institute (Contrôle Officiel Suisse de Chronomètre – COSC).

Problem

Sometimes the case or movement of watches with a chronometer certificate may need to be replaced. Consequently, the serial number of the case and the movement may no longer match, which renders the client's chronometer certificate void.

Movement replacement

Movement replacements should be avoided if possible

A movement replacement is possible in the following 2 cases:

1. The movement is rusty.
2. The client no longer has confidence in his watch and insists that the movement be replaced.

Case replacement

Case replacement should also be avoided.

A case should only be replaced if:

1. It is damaged beyond repair.

OMEGA “CHRONOMETER IDENTIFICATION CARD” FOR MOVEMENT AND CASE REPLACEMENTS

Chronometer Identification Card

- The OMEGA “Chronometer Identification Card” has been created for example A. The status is indicated on the card: O = original or E = exchanged.
- The OMEGA “Chronometer Identification Card” is only distributed to Swatch Group subsidiaries and authorised OMEGA agents. The cards may only be filled in by the head of Customer Service at the respective subsidiary or agent, who shall be solely responsible for maintaining correct documentation.

Example A

- Case or movement must be replaced. The client wants his watch to be reconditioned as rapidly as possible.

Solution A

For the movement

- The movement is replaced. The OMEGA “Chronometer Identification Card” is given to the client with the watch. The serial number of the new movement as well as its status (E = exchanged) are filled in. The serial number of the case and its status (O = Original) must also be filled in. The card must be stamped, signed and dated.

Solution A

For the case

- The case is replaced. The OMEGA “Chronometer Identification Card” is given to the client with the watch. The old serial number of the movement as well as its status (O = Original) are filled in. The serial number of the new case and its status (E = exchanged) must also be filled in (if the case has no serial number, the field for the serial number must be left empty). The card must be stamped, signed and dated.
- For future repairs or situations involving the guarantee, the OMEGA “Chronometer Identification Card” may be used as a reference.

Example B

- The case or the movement are to be replaced. The client insists on having the same serial number on the movement and on the case,

Example B

For the movement

For a movement replacement, the procedure is the following:

- Send the complete watch with repair form to OMEGA Bienne.
- The customer’s wishes must be clearly mentioned on the repair form.
- We erase the old movement’s serial number from the case and laser engrave the new movement’s serial number on the case. A new chronometer certificate is issued and given to the client.

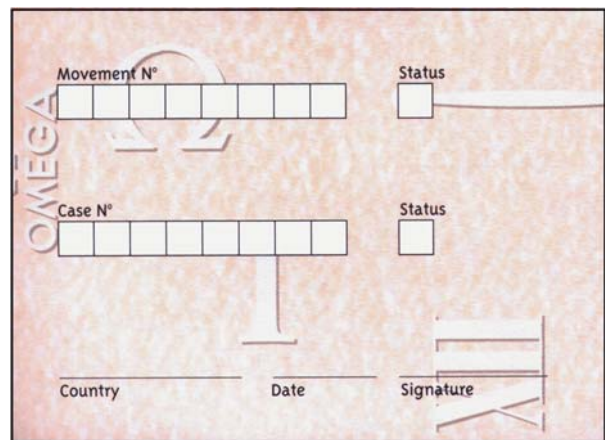
Solution B

For the case

The procedure is the following :



- Send the complete watch with repair form to OMEGA Bienne.
- The customer’s wishes must be clearly mentioned on the repair form.
- The serial number of the movement is engraved on the new case. The old case remains in Bienne.

OMEGA «Chronometer Identification Card»



Reference	Language
50350	French
50351	German
50352	English
50353	Spanish
50354	Italian

Reference	Language
50355	Portuguese
50356	Russian
50357	Arabic
50358	Chinese



		CALIBRES NO. 14		CS08-19-C-014-E	A
		Made by: pelrom	Date: 15.04.04		

Date-change on calibres 1128, 1150-1164, 1379 (1479), 1400, 1424, 1426, 1429, 1430 (1530), 1432 (1532), 1438 (1538), 1441, 1449, 1675, 2520, 2628

INFORMATION

The date on the above-mentioned calibres changes over a period of 1.5 to 2 hours. The date of the day which is drawing to a close is displayed in full until 11.45 p.m. At midnight, this date is still entirely visible at the bottom part of the date window, whilst the new day's date starts to appear at the top of the date window. The new date then moves down through the date window and the previous date gradually disappears. The whole operation is completed by 1.30 a.m. at the latest.

OMEGA uses this date-change system so that the change of date is still visible around midnight.

	 CALIBRES NO. 16	CS08-19-C-016-E	A

Calibre 1221

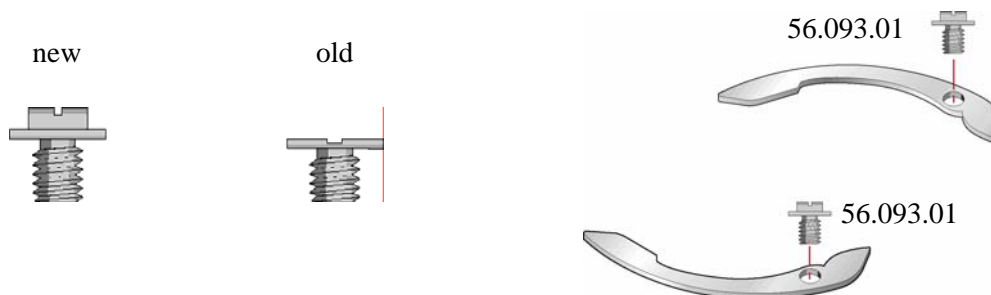
REPLACEMENT OF JUMPER SCREWS FOR JUMPING HOURS

Problem

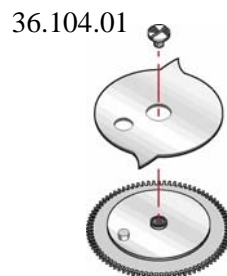
- When assembling the jumping hours module, the heads of the jumper screws for the jumping hours (no. 56.093.01), the heads of the driver screws for the jumping hours finger (no. 36.104.01), as well as the screw heads of the jumping hours mechanism plate (no. 16.079.01), may break easily when gripped. The screws 56.093.01 and 36.104.01 are identical.

Solution

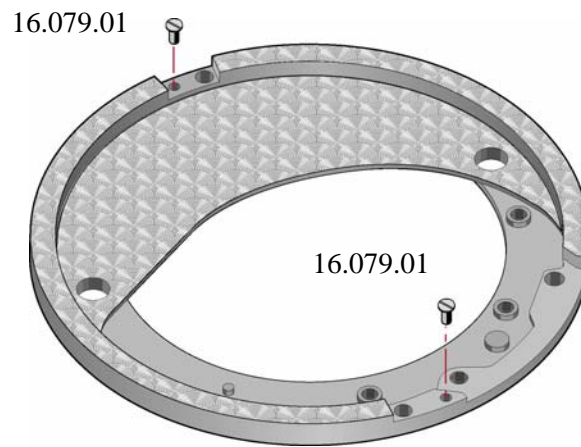
- The jumper screws for the jumping hours (no. 56.093.01) have been modified to prevent the heads from breaking. The reference has not changed. If the movement is disassembled, the two screws must always be replaced by the modified screws.



- The head of the driver screw for the jumping hours finger (no. 36.104.01) could not be changed (due to height restrictions). The screw must be screwed in very carefully.





- The screws for the jumping hours mechanism plate (no. 16.079.01) could not be modified either and must therefore also be screwed in very carefully.



Spare parts stocks

- The old jumper screws for the jumping hours (no. 56.093.01) may be used for the driver screw for the jumping hours finger (no. 36.104.01), given that they are identical. The new modified screws have the reference no. 56.093.01.



		CALIBRES NO. 17		CS08-19-C-017-E	A
		Made by: pelrom	Date: 15.04.04		

New Autoquartz calibre 1400B with 100 days Power reserve

GENERAL

The Autoquartz caliber 1400A was equipped with a 5 days power reserve system.

In the last series of the Seamaster 200M models, the Autoquartz caliber 1400B with 100 days power reserve was used.

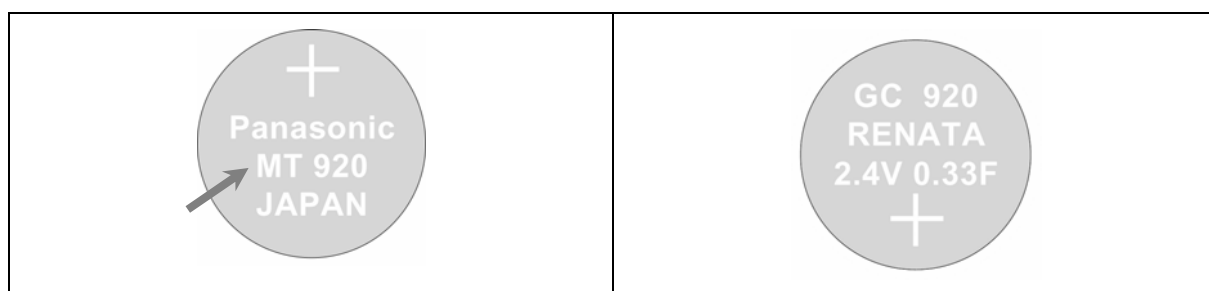
IDENTIFICATION

The parts which differ in the new 100 days version in comparison with the 5 days version are the following:

- Accumulator
- Electronic module
- Main plate

Accumulator

In the 100 days version an accumulator is used which can be identified by the inscription **MT 920**. The old version of 5 days used a capacitor with the inscription **GC 920**.



Accumulator (100 days)

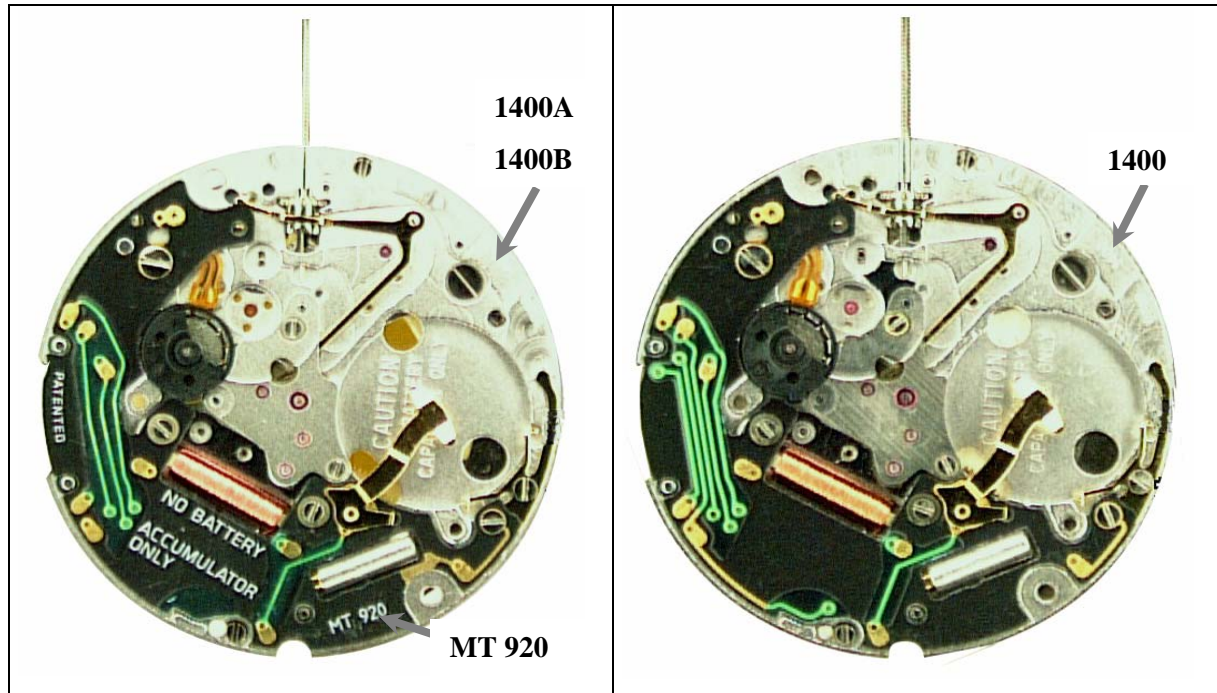
Capacitor (5 days)

Electronic module

- The new electronic module is also identified by the inscription **MT 920** as well as with additional text «**accumulator only**» (see picture on page 2).

Main plate

- The main plates of both versions are mainly identical, except the engraving of the caliber number which is **1400A** and **1400B** for the 100 days version, as well as **1400** for the 5 days version.



100 days version



5 days version

UP-GRADE SET REF. 722 1400B 4000SET (ON AN EXCHANGE BASIS)

- Electronic modules and capacitors for the 5 days version are no longer available from stock.
- For watches (5 days version) which need a CS intervention, whether on the electronic module or on the capacitor, we offer a special up-grade SET (ref. 722 1400B 4000SET) on an **exchange basis**, which allows a 5 days movement to be transformed into a 100 days movement.
- SET **722 1400B 4000SET** contains:
 - 722 1400B 4000 electronic module (100 days version)
 - 722 1400B 4014 accumulator (100 days version)

Important

Capacitor or electronic module from the old 5 days version **can not** be used with new accumulator or new electronic module.

		CALIBRES NO. 18		CS08-19-C-018-E	A
		Made by: pelrom	Date: 15.04.04		

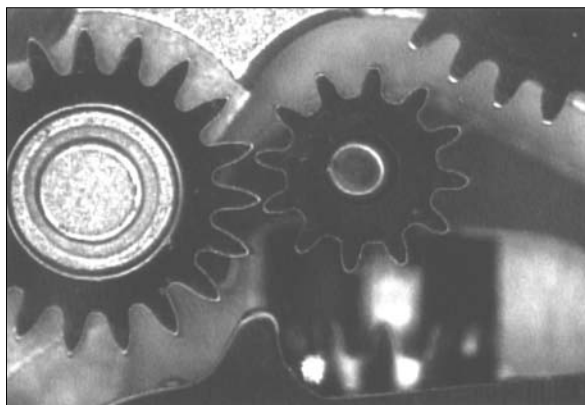
Hour losses on Seamaster GMT models Calibre 1128

PROBLEM

In the first versions of Seamaster GMT models equipped with calibre 1128 a phenomenon of lost hours on a few watches has been remarked.

Analysis

The teeth of *setting wheel 1128 31.100* are too short and provoke a butting of the gear *setting wheel - intermediate setting wheel 1120 31.101* (See picture below). As a result the upper part of *hour wheel 31.046*, which is in direct contact with the *intermediate setting wheel 1120 31.101* (via *intermediate setting wheel 1128 31.101* and an *additional wheel* riveted on *mechanism platform 1128 16.010.06*), may be momentarily blocked. Consequently, the watch owner recognises that the hour hand has lost one or more hours. The minute and second hands are, however, not affected by this failure.



SOLUTION

New setting wheel 1128 31.100

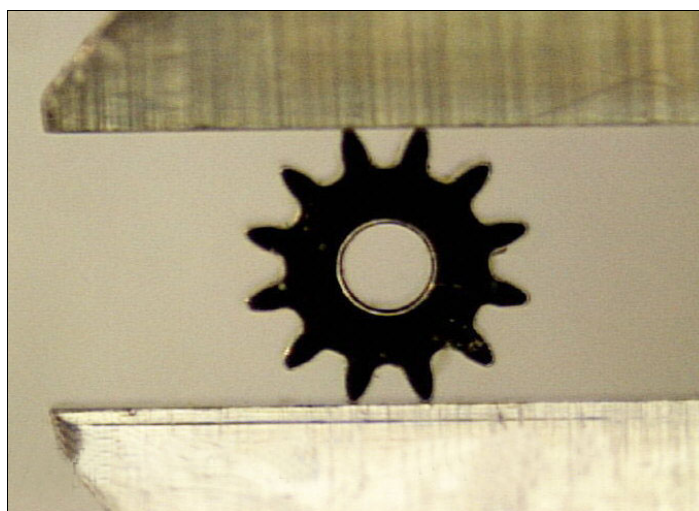
A new setting wheel with longer teeth has been designed (See below picture). With the new setting wheel the risk of butting is eliminated and the problem with the lost hours resolved.



Differentiation



The new *setting wheel* has the same reference number as the old one (ref. 1128 31.100). The two can, however, be distinguished by measuring the difference of diameter with a sliding caliper.

- The new *setting wheel* has a diameter of 1.54 mm (measure over 4 teeth with a sliding caliper as shown below).
- The old *setting wheel* has a diameter of 1.50 mm.



Stock of spare parts

All stocked *setting wheels* ref. 1128 31.100 in the old version have to be destroyed and replaced by the new version (with the same reference).

	 CALIBRES NO. 19	CS08-19-C-019-E	A
		Made by: pelrom	Date: 15.04.04

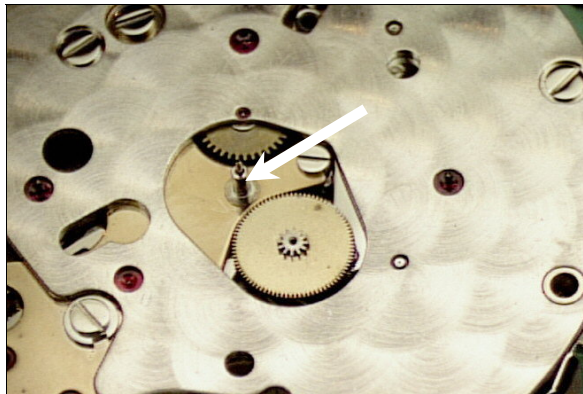
Free cannon pinion Calibres 1138, 1140, 1141, 1143, 3220

GENERAL

Problem

A number of watches with calibres 1138, 1140, 1141, 1143 and 3220 have been returned to the Customer Services, due to major rate problems or complete stoppage of the watch.

The movements have been analysed, and rusty sections between the centre tube of the chronograph module (see picture below) and the *free cannon pinion* ref. 3220 31.081P have been discovered.



NEW FREE CANNON PINION

Analysis

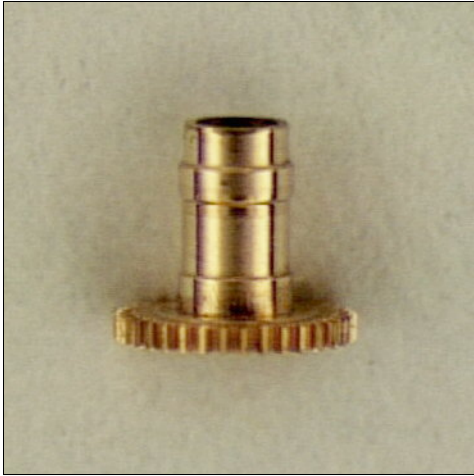
Tests with the steel *free cannon pinion* and lubricants did not give satisfactory results. In order to solve the problem, a new *free cannon pinion* made of a copper-beryllium alloy has been designed.

Solution

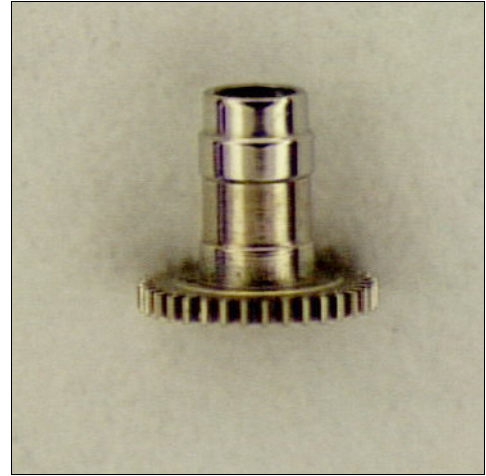
The parts of the movements with above mentioned rusty sections have to be carefully cleaned, and the old steel *free cannon pinion* must be replaced by the new version in copper-beryllium.

Differentiation

The new *free cannon pinion* in copper-beryllium alloy (see picture below left), can easily be distinguished from the old *free cannon pinion* in steel (picture below right) by the difference in colour.





New (yellow)



Old (white)

Stock of spare parts

The reference of the new *free cannon pinion* remains unchanged (3220 31.081P). All stocked *free cannon pinions* of the old version in steel must be destroyed and replaced by the new version.

		CALIBRES NO. 20		CS08-19-C-020-E	A
		Made by: pelrom	Date: 15.04.04		

Numbering of OMEGA calibres



STRUCTURE

Since 1999, all newly introduced calibres are numbered using the same structure. Calibres introduced before 1999 were allocated an arbitrary number, without any codification.

All new calibre numbers consist of a four-digit figure. The meaning of the **first** and **second** digits can be seen in the **table** on **page 2**.

The **third** and **fourth** digits are used to differentiate between calibres with the same functions and have **no specific meaning**.

The **letter** after the calibre number indicates the **version** of the calibre. A new version of a calibre becomes necessary if the technically modified spare parts are not interchangeable. (A = 1st version, B = 2nd version, etc.).

		CALIBRES NO. 21		CS08-19-C-021-E	A
		Made by: pelrom	Date: 15.04.04		

Replacement of calibre 1350 with calibre 1353

PROBLEM

As the stock of electronic modules and motors for calibre 1350 for recycling has been exhausted, it is no longer possible to obtain the following parts:

721 1350 69002 Frame with recycled motor

721 1350 69600 Recycled electronic module

SOLUTION

Complete calibre 1350 H0 movements will be replaced by complete calibre 1353 H0 movements. These movements can be recycled.

001 1350 H0 Movement cal.1350 H0 replaced by:

001 1353 H0 Movement cal.1353 H0

CALIBRE 1353

The components of calibre 1353 are not affected, since they can still be replaced.

721 1353 69002 Frame with recycled motor

721 1353 69600 Recycled electronic module

PS : Movements to be replaced must be returned to Omega SA, Spare Parts International, 2500 Bienne 4, Switzerland.

TABLE



Decoding table for the first and second digits:

A different codification applies to the second digit for chronographs (green column)

2	5	0	0	B
---	---	---	---	---



The first digit stands for:		The second digit stands for:		The second digit (for chronographs) stands for:	
0	Old numbering (with codification)	0	Hours, minutes	0	Second and minute counters
1	Old numbering (with codification)	1	Hours, minutes, date	1	Second and minute counters, date
2	Mechanical	2	Hours, minutes, small seconds	2	Second, minute and hour counters
3	Mechanical chronograph	3	Hours, minutes, small seconds, date	3	Second, minute and hour counters, date
4	Electronic	4	Hours, minutes, seconds	4	Flyback
5	Electronic chronograph	5	Hours, minutes, seconds, date	5	Flyback, date
6	Autoquarz	6	Other displays	6	Other displays
7	Autoquarz chronograph	7	Reserve (not yet allocated)	7	Reserve (not yet allocated)
8	Reserve (not yet allocated)	8	Reserve (not yet allocated)	8	Reserve (not yet allocated)
9	Reserve (not yet allocated)	9	Reserve (not yet allocated)	9	Reserve (not yet allocated)

	 CALIBRES NO. 22	CS08-19-C-022-E	A
		Made by: pelrom	Date: 15.04.04

Technical improvements Calibre 3303

GENERAL

On the new Omega chronograph calibre 3303, three technical improvements have been made. These improvements concern:

1. *Hammer operating lever 722 3303 55.047*
2. *Column wheel operating lever 722 3303 55.040*
3. *Screw for hammer-lever banking bridge 722 3303 6034*

1. HAMMER OPERATING LEVER 722 3303 55.047

Problem

The chronograph hand does not return properly to zero when the return to zero pusher is used.

Analysis

If the return to zero pusher is pressed strongly while the chronograph is running, the *hammer operating lever* may bend slightly (see arrow below). As a result, the return to zero function no longer works properly.



Solution

On movements with the above-mentioned problem, the *hammer operating lever* must be replaced with the new version with modified shape. The new *operating lever* is available from Omega, the reference remains unchanged (ref. 722 3303 55.047).

2. COLUMN WHEEL OPERATING LEVER 722 3303 55.040

Problem

The start/stop function no longer works.

Analysis

Due to a deficiency in the material, the *column wheel operating lever* may bend at its weakest point (see arrow below) when the start/ stop pusher is pressed.



Solution

On movements with the above-mentioned problem, the *column wheel operating lever* must be replaced with the new modified version. The new *column wheel operating lever* is available from Omega, the reference remains unchanged (ref. 722 3303 55.040).

Important

The encircled part of the *column wheel operating lever* (see picture above), must be kept in its original shape and **it is not allowed to bend it in any way**.

3. SCREW FOR HAMMER-LEVER BANKING BRIDGE 722 3303 6034

Problem

The start/stop function no longer works. The basic movement may also stop working.





Analysis

The head of the *hammer-lever banking screw*, which also holds the column wheel in place, (see arrow) has broken. As a result, the start/stop push function does not work and the basic movement may be stopped because the screw head or the hammer limitation bridge (ref. 722 3303 10.615) are blocking the movement. The screw head may break, because the wrong screws have been used on a few pieces in production.

Solution

If the thread of the hammer-lever banking screw cannot be removed from the barrel bridge, the complete *barrel bridge* (ref. 722 3303 10.041) has to be exchanged. The correct hammer-lever banking bridge screw (ref. 722 3303 6034) must be used.

	 CALIBRES NO. 23	CS08-19-C-023-E	A

Modification of the electronic module Calibre 1310

PROBLEM

For reasons of environmental protection, it is prohibited to use mercury batteries. These have been replaced by silver oxide batteries.

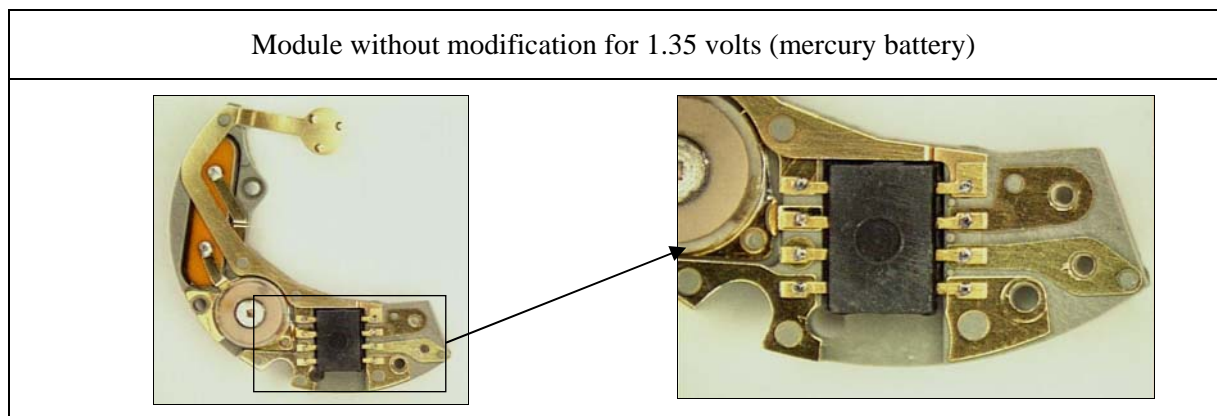
The silver oxide batteries have a voltage of 1.55 volts, whereas mercury batteries have 1.35 volts.

We have noticed that some motors on calibre 1310 stop intermittently or cease to function due to the higher voltage.

SOLUTION

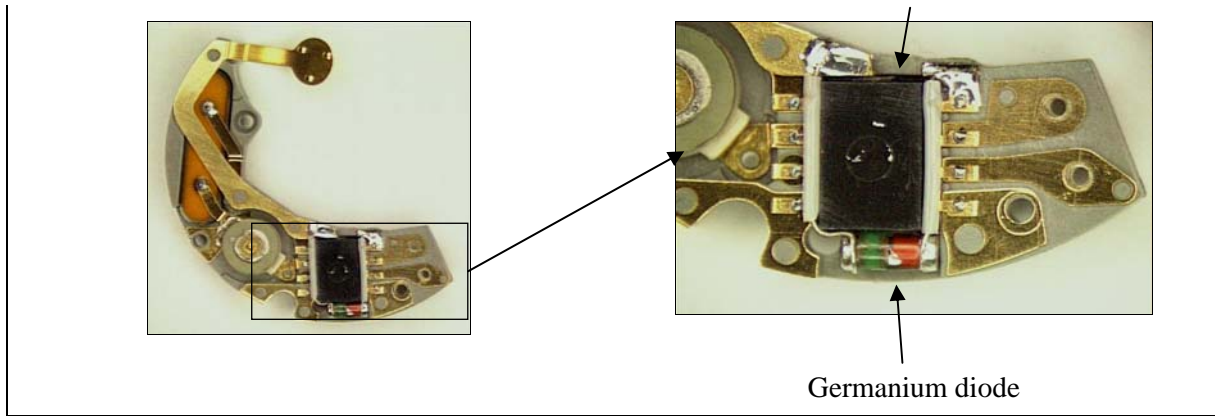
Modified module

In order to power the motor with 1.35 volts and to avoid the motor stopping, a germanium diode has been connected in series between the motor and battery. This germanium diode reduces the voltage by 0.20 volts exclusively for the motor. The module continues to be supplied with 1.55 volts and can operate at this voltage without any problems.



Modified module for 1.55 volts (silver oxide battery)

Separate conductive track





BATTERIE

If a watch with calibre 1310 is sent in for a battery change and it does not yet have the modified module, the complete watch must be sent to OMEGA Customer Service in Switzerland. These watches will then undergo a complete maintenance service and be fitted with the modified module.

If the watch already has the modified module fitted, a normal battery replacement is all that is required. The results of the electronic measurements remain unchanged for the modified module.

COMPLETE MAINTENANCE SERVICE

As before, all watches requiring a complete maintenance service must be sent to OMEGA Customer Service in Switzerland.

	 CALIBRES NO. 24	CS08-19-C-024-E	A
		Made by: pelrom	Date: 15.04.04

Change from calibre 1665A to calibre 1665B Multifunction

GENERAL

Calibre 1665A has several functions. In order to extend and improve these, the following changes have been made.

As a result of the changes, calibre 1665A becomes calibre 1665B.


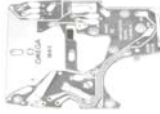




Functions	Calibre 1665A Old version	Calibre 1665B New version
Languages	French – English – Spanish	French – English – Spanish – German
Changing between functions	Slowly turning the crown changes from one function to another	The crown must be turned faster than on version 1665A Advantage: During normal wear, the function mode cannot be changed inadvertently
Time setting	The digital display flashes	The digital display flashes A “T” also appears
Synchronisation Digital display - hands	Digital time is displayed	Digital time is displayed An “R” also appears
Calendar	Day – Month	Day – Month – Year Perpetual calendar until 2099
Timer	Last programmed time is not stored	Last programmed time is stored
Time zone display T2	Only displays time zones with one full hour difference	Also displays time zones with ½ hour difference
Chronograph: functions	1 function: ADD	2 functions: SPLIT (SP displayed) ADD (ADD displayed)
Alarm	AL is displayed when the alarm is set	AL is not displayed when the alarm is set



IDENTIFICATION

The following components are different on the new calibre 1665B:

- Main plate
- Electronic module
- Time display
- Rotor
- Screw for contact strip

SPARE PARTS



Calibre 1665A Old version		
722 1665 100	Main plate	
722 1665 4000	Electronic module	
722 1665 9447	Time display	
722 1665 4211	Rotor	
722 0000 3141	Screw for contact strip	
600 1665 H0B	600 1665 H0N	
600 1665 H0TB	Complete movement	
<p>Note ! - The above-mentioned parts, as well as complete movements, are available while stocks last</p> <p style="padding-left: 40px;">- All other parts remain available and can be used for <i>both versions</i></p>		

Calibre 1665B	
New version	
600 1665B 0B	
600 1665B 0N	Complete movement
600 1665B 0TB	
722 1665B 3527	Screw for contact strip
 	
Note! - The new version is only available as a complete movement replacement - There is only limited availability of individual parts. See table for calibre 1665A, old version under notes	

STANDARD REPLACEMENT

OMEGA will replace calibre 1665A with the new version 1665B at a special price.

The movements to be replaced must be sent to Omega SA, Spare Parts International, 2500 Bienne 4, Switzerland.

	 CALIBRES NO. 25	CS08-19-C-025-E	A
		Made by: pelrom	Date: 15.04.04

Technical improvements

Calibres 1150A, 1151A&B, 1152A&B, 1154A, 1155A, 1164A&B

GENERAL

Three technical improvements have been made on the Omega chronograph calibre 1150 and family. These improvements concern:

1. *Hour hammer and hour hammer operating lever*
2. *Hour counting wheel and hour counter lock*
3. *New bushings for the barrel arbor pivots*

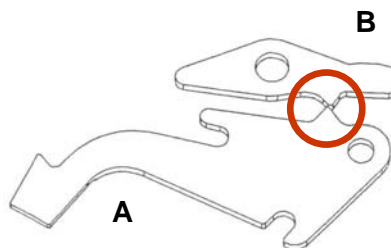
1. HOUR HAMMER & HOUR HAMMER OPERATING LEVER

Problem

The chronograph has been started; the sweep chronograph hand is running. If the push bottom is gently activated unintentionally, the reset function may be triggered.

Solution

To solve the problem, the shapes of *hour hammer* (A) and *hour hammer operating lever* (B) have been modified at the encircled place.



New Product

On the new products, these modifications concern the latest version of calibres 1151A, 1152A, 1164A as well as the new calibres 1151B, 1152B and 1164B, which will be available soon.

Spare Parts

Calibres with the old version of *hour hammer* and *hour hammer operating lever* can be up-graded with the new parts.

NEW PARTS

722 1150 8670/80

New hour hammer operating lever &
New hour hammer



Note ! Both parts are available in stock, but only together as a package. They must be used together, since they cannot be combined with the parts of the old version.

OLD PARTS

722 1150 8670

Old hour hammer operating lever

722 1150 8680

Old hour hammer



Note ! These parts are no longer available from stock.

2. HOUR COUNTING WHEEL & HOUR COUNTING LOCK

Problem

The hour counter locking system sometimes does not work properly and therefore the hour counter hand may run when the chronograph mechanism is stopped.

Solution

To solve the problem, both parts involved have been redesigned. The new *hour counting wheel* has 189 teeth (Old version 126) and the new *hour counter lock* has one tooth in metal alloy Durnico (Old version 9 teeth in synthetic material Delerin). **On watches with the above-mentioned problem, both parts must be exchanged with the new version.**





New Product

On the new products, these modifications concern only the new calibres 1151B, 1152B and 1164B, which will be available soon.

Spare Parts

Calibres with the old version of *hour counting wheel* and *hour counting lock* can be up-graded.

NEW PARTS		
722 1150B 8600	New hour counting wheel	
722 1150B 8690	New hour counting lock	
Note !		
- They can be used for all movement versions.		
- They must be used on old movement versions with hour counter stop problems.		
- Both new parts must <u>always be used together</u> , since they cannot be combined with the parts of the old version.		

OLD PARTS

722 1150 8600 Old hour counting wheel



722 1150 8690 Old hour counting lock



Note ! - They can be used for the old A movement versions.
- Both old parts must be used together, since they cannot be combined with the parts of the new version.

3. NEW BUSHINGS FOR BARREL ARBOR PIVOTS

Problem

When the bearings of the barrel arbor pivots are worn, mainplate and barrel & train wheel bridge have to be exchanged completely.




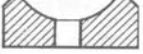
Solution



To facilitate the repair, bushings for the barrel arbor pivots have been placed in mainplate and barrel & train wheel bridge. **In case of worn pivot bearings, the bushings only can be replaced.**



New Product

On new products, these new bushings concern only the new calibres 1151B, 1152B and 1164B, which will be available soon.

Spare Parts

NEW PARTS		
<p>722 1151B 100 722 1152B 100 722 1164B 100</p>	<p>New main plate (with bushing)</p>	
<p>722 1151B 106</p>	<p>New barrel & train wheel bridge (with bushing)</p>	
<p>Note ! New bridge and main plate can be used for all movement versions.</p>		
<p>722 1150B 70401</p>	<p>New bushing for main plate</p>	
<p>722 1150B 70400</p>	<p>New bushing for barrel & train wheel bridge</p>	

OLD PARTS		
<p>722 1151 100RB 722 1152 100RB 722 1164 100RB</p>	<p>Old main plate (without bushing)</p>	
<p>722 1151 106RB</p>	<p>Old barrel & train wheel bridge (without bushing)</p>	
<p>Note ! The old parts are only available while stock lasts.</p>		

		CALIBRES NO. 26		CS08-19-C-026-E	A
		Made by: pelrom	Date: 05.03.2004		

Lubricating Reversing wheels of omega calibres: 1108 - 1111, 1120 - 1128, 2500, 2627, 2628, 1150 - 1164

GENERAL

Lubricating reversing wheels at customer service can be problematic. The correct procedure for ensuring optimum functioning of the reversing wheels is described in this CS-Info.

PROBLEM

Classical lubrication of the reversing wheels applies too much oil, which means that the levers can get stuck in the wheel. This means that the self-reversing mechanism will no longer work properly.

SOLUTION

To prevent the levers from getting stuck in the wheel, the wheels are dipped into a mixture of lubricant and solvent. After application the solvent evaporates, leaving a fine and even film of lubricant on the wheel and the levers.

Production

In production, the reversing wheels are lubricated as follows:

After cleaning, the wheels are dipped in the special solution LUBETA V105 in the cleaning machine for 2 minutes and then dried for 3 minutes.

Customer Service


For Customer Service, the wheels can be treated individually using a more simple procedure:



1. Firstly, the wheel is cleaned in the cleaning machine
2. The cleaned wheel is dipped into a glass filled with the special solution LUBETA V105.
3. The wheel is then removed from the solution and surplus solution is removed using an air blower.
4. The wheel is left to dry under a dust cover for 15 minutes (avoid the contact between the wheel and the plastic because the solution could attack the plastic)

Important:

The reversing wheels supplied by OMEGA are already treated with LUBETA V105. These treated wheels can be stored for 4 years. The wheels may discolour slightly with time due to the film of lubricant. However, this does not affect their function. If the wheels have been stored for more than 4 years, they should be cleaned and treated in accordance with the above procedure.

WERKZEUGE

Lubricant		LUBETA V105 (1000 ml) Ref. 504 5005
------------------	---	--

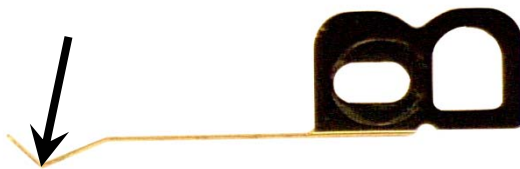
		CALIBRES NO. 27		CS08-19-C-027-E	A
		Made by: pelrom	Date: 05.03.2004		

Technical improvements / Calibres 3301, 3303, 3313

MINUTE COUNTER JUMPER 722 3303 55.143

Problem

There has been a noticeable increase in the number of watches for repair due to broken *minute counter jumpers* on calibres 3301, 3303 and 3313. The *minute counter jumper* breaks at the bent end (see arrow on picture left). After the break, if the chronograph is reset, the jumper bends completely (see picture on the right).



Solution

A new *minute counter jumper* has been designed.

Spare Parts



The reference of the new *minute counter jumper* remains unchanged. The old version has been removed from our stock. We recommend you replace your stock of old parts with the new version.

SPARE PARTS

722 3303 55.143 New minute counter jumper



Note ! The improved version is available from date code 42/03 (week 42/2003) on.

	 CALIBRES NO. 28	CS08-19-C-028-E	A

Technical improvements

Calibre family 861 (863, 1861, 1863, 1866 etc.)

STEM-BOLT FOR HAMMER 722 0861 1759

Problem

An increase of watches for repair due to broken *stem-bolt for hammer* on calibre family 861 has been noticed.

Solution

A new *stem-bolt for hammer* with modified shape and improved material has been designed.

Spare Parts



The reference of the new *stem-bolt for hammer* remains unchanged. The old version has been removed from our stock. We recommend you replace your stock of old *stem-bolt for hammer* with the new version.

SPARE PARTS

722 0861 1759 New stem-bolt for hammer



Note! The improved version is available from date code **35/03** (*week 35/2003*).

	 CALIBRES NO. 29	CS08-19-C-029-E	A

Technical improvements Calibre Family 1150 (1151, 1152, 1154, 1164 etc.)

RATCHET WHEEL DRIVING WHEEL 722 1150 1482

Problem

There are two problems that have been observed on the *ratchet wheel driving wheel*:

1. *The pinion becomes loose because of a faulty riveting*
2. *The pinion teeth break apart*

Solution

In order to solve the above mentioned problems, the riveting as well as the strength of the pinion material have been improved.

Spare parts



The reference of the new *ratchet wheel driving wheel* remains unchanged. The old version has been removed from our stock. We recommend you replace your stock of old *ratchet wheel driving wheel* with the new version.

SPARE PARTS

722 1150 1482 New ratchet wheel driving wheel





Note! The improved version is available from date code 39/03 (week 39/2003).

	 CALIBRES NO. 30	CS08-19-C-030-E	A

CS Policy for calibre 2500

	Calibre 2500A	Calibre 2500B	Calibre 2500C
Spare Parts availability	All spare parts are available. Exception: - The escapement parts are <u>not available</u> !	All spare parts are available.	All spare parts are available. Exception: - Balance bridge (see CS-INFO Calibres No. 33)
Repair (on the markets)	Normal repair service is allowed. If problems with the Co-Axial escapement occur, the watch <u>must be sent to Omega Bienne</u> .	Repair service , according to Omega guidelines and the instructions indicated in the technical guide, is allowed .	Repair service , according to Omega guidelines and the instructions indicated in the technical guide, is allowed .
Repair (at Omega Bienne)	On watches equipped with calibre 2500A sent to Omega for repair, we systematically exchange the movement for calibre 2500B. The serial number of the case is erased and replaced with the serial number of the new movement. A new COSC chronometer certificate is included with the repaired watch.	Normal repair service is carried out.	Normal repair service is carried out.
Miscellaneous	Calibre 2500A was exclusively used in a limited edition of 3'100 watches in 1998.		

- **All other Co-Axial products have to be repaired according to the Omega guidelines and the instructions indicated in the technical guides.**

	 CALIBRES No. 31	CS08-19-C-031-E	A

Technical alterations / Calibre 2601

PROBLEM

The click screw breaks.

SOLUTION



A new click screw has now been produced with altered dimensions.

Dimensions of the *old* screw: Diameter: 1.50mm Height: 0.20mm

Dimensions of the *new* screw: Diameter: 1.40mm Height: 0.30mm

REPLACEMENT PARTS

The reference number for the click screw has been changed. The old version of the screw has been removed from our stock, and we recommend that this old screw should now be replaced by the new version.

REPLACEMENT PARTS	
722 2601 6018 <i>Old screw for the click</i>	
722 2601 6004 New screw for the click	
NB The new screw has been available since date code <u>46/03</u> (i.e. week 46 /2003).	

PROBLEM



The dial screw comes loose.

SOLUTION

A new stainless steel dial screw with improved thread and a longer head has been produced.

SPARE PARTS

The reference number for the dial screw has been changed. The old version of the screw has been removed from our stock, and we recommend that this old screw should now be replaced by the new version.

SPARE PARTS	
722 2601 5145	<i>Old dial screw</i> 
722 2601 5152	New dial screw 
NB	The new screw has been available since date code <u>02/04</u> (i.e. week 46 /2004).

IMPORTANT

Watches with a calibre 2601 movement that need to undergo a maintenance service must be returned to Omega Customer Service.

Exceptions

Service outlets that are specifically trained to deal with this calibre and have the required tools at their disposal.